

#### DETAILED ACTION

This office action is in response to the amendment filed 3/25/10. Claims 5 and 7 are cancelled. Claims 1 – 4, 6, 8 - 32 are now pending.

#### ***Terminal Disclaimer***

The terminal disclaimer filed on 5/21/10 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 2007/0272597 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ryan Brady on 5/21/10.

The application has been amended as follows:

In claim 1, lines 3 and 6, change "density level ds" to -- density level (ds) --

In claim 1, line 11, change "density threshold ds" to -- density threshold (ds) --

In claim 1, line 13, change "the density ds" to -- the density (ds) --

In claim 1, line 13, change "said density ds" to -- said density (ds) --

In claim 6, line 2, change "apparent density ds" to -- apparent density (ds) --

In claim 24, line 2, change "the chosen ds" to -- the chosen density (ds) --

In claim 24, line 5, change "threshold density ds" to -- threshold density (ds) --

In claim 24, line 7, change "ds" to -- (ds) --

In claim 26, line 4, change "ds in an increasing" to -- (ds) in an increasing --

In claim 27, line 2, change "ds of the precise" to -- (ds) of the precise --

In claim 29, line 4, change "density ds" to -- density (ds) --

### ***Reasons for Allowance***

Claims 1 – 4, 6 and 8 – 32 are allowed.

The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest reference of FERAUDY (US 6,460,788).

Applicant claims:

Method for selective separation by density of each constituent of a mix of organic synthetic materials to be reused by recycling, stable within a precision level of + 0.0005 about a density level (ds) chosen as the density separation threshold equal to at least 1, and comprising separating them by density difference, in an aqueous suspension of an appropriate quantity of powder particles dispersed in a sufficient quantity to create the

density level (ds) chosen as the separation threshold of at least one of the constituents of the mix of synthetic organic materials to be selectively separated, wherein the separative suspension is formed from:

- a) solid powder particles with a size grading cutoff not more than 5 micrometer, these solid powder particles thus sized being dispersed in the aqueous phase in a sufficient quantity to reach the chosen density threshold (ds),
- b) a water soluble stabilizer to stabilize the rheological and invariance characteristics of the density (ds) with a precision of said density (ds) of the suspension of solid powder particles equal to +/- 0.0005.

FERADUDY discloses a method of separating a mixture of polymers derived from waste using a density separation technique. The density separation is done in a liquid medium. The density of the polymers ranges from below 1 to 1.25. The separative suspension is formed from

- (a) solid powder particles and
- (b) a water soluble stabilizer.

FERAUDY fails to teach the size of the solid powder particles. FERAUDY discloses density measurements of 1.25, 1.18, 1.15, 1.10 and 1.05, showing a precision in the +/- 0.005 range, failing to teach a precision of +/- 0.0005.

No prior art teaches or fairly suggests the claimed method disclosed above wherein Applicant shows unexpected results when the solid particle size is below 5

micrometer, which allows more precision in controlling the density differential wherein a precision of +/- 0.0005 is achieved.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANCES TISCHLER whose telephone number is (571)270-5458. The examiner can normally be reached on Monday-Friday 7:30AM - 5:00 PM; off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/  
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Frances Tischler  
Examiner  
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/FT/